

50X1-HUM

CLASSIFICATION CONFIDENTIAL  
 CENTRAL INTELLIGENCE AGENCY  
 INFORMATION FROM  
 FOREIGN DOCUMENTS OR RADIO BROADCASTS

COUNTRY USSR  
 SUBJECT Scientific - Engineering, water pipelines, vulnerability  
 HOW PUBLISHED Bimonthly periodical  
 WHERE PUBLISHED Moscow  
 DATE PUBLISHED 15 Apr 1953  
 LANGUAGE Russian

REPORT CD NO. [REDACTED]  
 DATE OF INFORMATION 1953  
 DATE DIST. 7 May 1954  
 NO. OF PAGES 1  
 SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES. WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED, ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Byulleten' stroitel'noy tekhniki, No 7, p 25

# DEPTHS FOR LAYING WATER PIPELINES IN USSR

Engr D. N. Chebotarev

According to certain sources (Handbook on Water Supply Lines and Sewerage [Spravochnik po vodoprovodu i kanalizatsii], by V. F. Kozhinov and A. M. Konyushkov, Stroyizdat, 1947; and Water Supply [Vodosnabzheniye], by N. N. Geniyev, N. N. Abramov, and V. M. Pavlov, Stroyizdat, 1950) the following depths, in meters, are recommended for laying pipe in the USSR:

Southern regions	1.30 - 1.70
West and southwest	2.0 - 2.20
Central	2.20 - 2.70
Northwest	2.40 - 2.90
North and east	2.60 - 3.10

However, these data disagree with the map of isotherms, which shows much smaller freezing depths and which is used to determine depths for laying the foundations of all types of structures. Operation of water pipelines in the south and central Ukraine has shown that water pipelines laid to a depth (to top of pipe) of 0.80, 1.10, and 1.20 m have been working normally for 20 years and more. At a plant [not identified] in Dneprodzerzhinsk, a cast-iron water pipeline 600 mm in diameter has been laid at a depth of 0.60 m. At a plant [not identified] in the Donbass, a water pipeline has been laid at a depth of 1.20 m. Long-term observation of a series of water pipelines in use has confirmed that there is no basis for use of the pipe-laying depths recommended by the above-mentioned handbooks, and that the laying of water pipelines at such depths results in nonproductive expenditures.

Therefore, in order to reduce labor and the cost of laying water pipelines at a group of plants in the Donbass, the Yuzhspetsstroy Trust shortened (by cutting and welding) the fire hydrants which had been delivered. The Moscow-type hydrants No 1 and 2 which are used in the south and central Ukraine were shortened: No 1 by 650 mm, and No 2 by 890 mm, reducing hydrant weight by 40-60 kg.

50X1-HUM

CLASSIFICATION		CONFIDENTIAL	
STATE	NAVY	NSRB	DISTRIBUTION
ARMY	AIR	FBI	